

Table 1. The outcome of locking tunneled hemodialysis catheters with cefotaxime and heparin in terms of catheter thrombosis, CRBSI incidence, and CRBSI-related mortality (July 2002–June 2003)

Tunneled HD catheter events	Control group (<i>N</i> = 19) (heparin alone, 6935 catheter days) <i>N</i> , total, %	Study group (<i>N</i> = 67) (cefotaxime + heparin, 24,455 catheter days) ^a <i>N</i> , total, %	Relative-risk reduction (%), 95% CI, <i>P</i> value
Catheter thromboses	6/19 (31.5)	9/67 (13.4)	57.3%, 1.340–4.701, 0.003
CRBSI episodes	17/19 (2.45/1000 catheter-days)	14/67 (0.57/1000 catheter-days)	76.7%, 3.086–6.430, < 0.0001
CRBSI-related mortality	5/19 (31.6)	7/67 (10.4)	67.1%, 1.517–5.864, < 0.001

95% CI, 95% confidence interval; CRBSI, catheter-related blood-stream infections.

^a Cefotaxime-heparin 'lock' solution composition, cefotaxime 10 mg/mL, heparin 5000 U/mL (to fill 1.3 mL in venous and 1.2 mL in arterial lumen of the catheter with combined volume of approximately 2.5 mL containing total of 25 mg of cefotaxime).

observed in 'locked' group compared with control group (Table 1).

Thus, locking HD catheters with cefotaxime may evenly reduce the risk of development of CRBSI besides minimizing the odds of aminoglycoside-associated ototoxicity.

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REFERENCES

- McINTYRE CW, HULME LJ, TAAL M, FLUCK RJ: Locking of tunneled hemodialysis catheters with gentamicin and heparin. *Kidney Int* 66:801–805, 2004
- DOGRA GK, HERSON H, HUTCHISON B, *et al*: Prevention of tunnelled haemodialysis catheter-related infections using catheter-restricted filling of gentamicin and citrate: A randomised control study. *J Am Soc Nephrol* 13:2133–2139, 2002
- SAXENA AK, PANHOTRA BR, NAGUIB M: Sudden irreversible sensory-neural hearing loss in a diabetic on hemodialysis, receiving amikacin as antibiotic-heparin lock. *Pharmacotherapy* 22:105–108, 2002
- SAXENA AK: Ototoxicity from the aminoglycosides-heparin/citrate locks applied for the prevention for the prevention of hemodialysis catheter-related infections. *J Vasc Access* 4:35–36, 2003
- SAXENA AK, PANHOTRA BR, AL-GHAMDI AMA: Antibiotic-heparin lock technique: A potentially precious tool to prevent hemodialysis catheter-related septicemia. *Saudi J Kidney Dis Transplant* 15:67–70, 2004

The differential impact of risk factors on mortality in hemodialysis and peritoneal dialysis

To the Editor: In the article by Vonesh *et al* [1], discrepancies in survival on different treatment modalities for different patient groups is described in a large cohort of patients. Although a considerable number of comorbidity conditions were included for this variable, I feel that a major variable (i.e., the failed transplant recipi-

ent returning to dialysis) should have been included, or preferably should have been added as a separate risk factor for mortality in dialysis patients.

These patients are at high risk for premature death, excluding death within the first 90 days after starting dialysis, especially when they continue even low dose immunosuppressive medication during dialysis [2, 3]. Furthermore, these patients generally start on hemodialysis during the first period after transplant failure (i.e., the first year after graft failure). This would negatively influence the outcome for this treatment modality as compared to peritoneal dialysis with regard to mortality, and would, therefore, be another plausible explanation for the high initial mortality associated with hemodialysis found in this study.

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REFERENCES

- VONESH EF, SNYDER JJ, FOLEY RN, COLLINS AJ: The differential impact of risk factors on mortality in hemodialysis and peritoneal dialysis. *Kidney Int* 66:2389–2401, 2004
- SMAK GREGOOR PJH, KRAMER P, WEIMAR W, VAN SAASE JLCM: Infections after renal allograft failure in patients with or without low-dose maintenance immunosuppression. *Transplantation* 63:1528–1530, 1997
- SMAK GREGOOR PJH, ZIETSE R, VAN SAASE JLCM, *et al*: Immunosuppression should be stopped in patients with renal allograft failure. *Clin Transplant* 15:397–401, 2001

Prevention of renal cell carcinoma from hemodialysis patients by regulating epigenetic factors

To the Editor: Long duration of patients on hemodialysis induces an increased incidence of renal cell carcinoma